AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q80489

U.S. Application No.: 10/802,883

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

- 1. (currently amended): A cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card, comprising a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 um.
- (original): The cleaning sheet as claimed in claim 1, wherein the vinyl polymer is an acrylic polymer.
- 3. (currently amended): The cleaning sheet as claimed in claim 1, wherein the cleaning layer comprises is formed by irradiating radiation to a mixture containing a urethane polymer and a vinyl monomer, being irradiated with radiation to cure it and contains the urethane polymer and a vinyl polymer.
- 4. (original): The cleaning sheet as claimed in claim 1, wherein the cleaning layer is formed by reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form the urethane polymer to form a mixture containing the urethane polymer and a vinyl monomer, and irradiating the mixture with radiation to cure it.
- (original): The cleaning sheet as claimed in claim 1, further comprising a backing layer.

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6. (original): The cleaning sheet as claimed in claim 5, further comprising a pressure-sensitive adhesive layer, wherein the cleaning layer is provided on one surface of the backing layer and the pressure-sensitive adhesive layer is provided on another surface of the backing layer.

7.-12. (canceled)

- 13. (original): A transporting member comprising a support and the cleaning layer of claim 1 provided on the support.
- 14. (original): The transporting member as claimed in claim 13, wherein the cleaning sheet is provided on the support through a sticking means.
- 15. (original): The transporting member as claimed in claim 13, wherein the support is a wafer

16.-18. (canceled)

19. (currently amended): A method of producing a cleaning sheet, comprising the steps of:

reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form a urethane polymer, thereby forming a mixture containing the urethane polymer and the vinyl monomer:

coating the mixture on a release sheet or a backing layer; and

irradiating the coated mixture with radiation to cure the mixture to form the cleaning layer,

wherein said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 µm.

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20. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of the cleaning sheet with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said cleaning sheet comprises a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein, said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 um.

- 21. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of a transporting member with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said transporting member comprises a support and a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the transporting member, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains additives in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 um.
- 22. (currently amended): A cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card, comprising a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning

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layer contains no additives in amounts within a range in which the probe needle is worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 um.

- 23. (previously presented): The cleaning sheet as claimed in claim 22, further comprising a backing layer.
- 24. (previously presented): The cleaning sheet as claimed in claim 23, further comprising a pressure-sensitive adhesive layer, wherein the cleaning layer is provided on one surface of the backing layer and the pressure-sensitive adhesive layer is provided on another surface of the backing layer.
- 25. (previously presented): A transporting member comprising a support and the cleaning layer of claim 22 provided on the support.
- 26. (currently amended): A method of producing a cleaning sheet, comprising the steps of:

reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form a urethane polymer, thereby forming a mixture containing the urethane polymer and the vinyl monomer:

coating the mixture on a release sheet or a backing layer:

and

irradiating the coated mixture with radiation to cure the mixture to form the cleaning layer,

wherein said cleaning layer contains no additives in amounts within a range in which the probe needle is worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the

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foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 µm.

27. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of the cleaning sheet with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said cleaning sheet comprises a cleaning layer having a surface, wherein the surface of the cleaning layer forms one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives in amounts within a range in which the probe needle is worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 um.

28. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of a transporting member with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said transporting member comprises a support and a cleaning layer having a surface, wherein the surface of the cleaning layer forms one surface of the transporting member, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives in amounts within a range in which the probe needle is worn, and wherein the cleaning layer has an initial clastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on from a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 um.